

Security Awareness and the Ebbinghaus Effect

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Abstract:

You've worked really hard and focused on *their* needs and realities in putting together a security awareness program for a specific target audience segment in your organization. They were very receptive when you delivered the training: laughing at your jokes, smiling in recognition at your carefully crafted real-world examples and learning parables, nodding in agreement with your business-related reasoning, even offering solid suggestions for improvement to the new security procedures you detailed. But when you go back a month later to measure progress against behavioral goals of the awareness and training program, everything is operating just as it was before you did the training. They've forgotten everything. It's as if you'd never been there. What happened?

Blame Herman Ebbinghaus. While teaching in Berlin in the 1870's, he analyzed retention of learning and produced a "Curve of Forgetting" that empirically demonstrated that only one-third of an audience retains a delivered message after one hour and only 28% remember it after 2 days. Advertisers deal with the Ebbinghaus Effect by repeating the same message over and over again, risking annoyance for the effect of having the product stick in memory. Can we afford to do that in security?

We will analyze the Ebbinghaus effect as it pertains to our profession and give some recommendations to help change the shape of the curve of forgetting. We'll also look at some more of his relevant findings and try to apply them to our current and future training situations.

Biography:

John O'Leary, CISSP, is President of O'Leary Management Education. His background spans four decades as an active practitioner in information systems, IT Security and contingency planning. John has designed, implemented and managed security and recovery for networks ranging from single site to multinational. O'Leary has trained tens of thousands of practitioners, and regularly conducts on-site programs at major corporations and government facilities worldwide. He has also facilitated meetings of Peer Groups, where security professionals from diverse corporations share ideas, concerns and techniques. John was the recipient of the 2004 COSAC award and the Eurosec 2006 Prix de Fidelite . He has yet to fall for a Nigerian money scheme, but will almost always divulge a password for chocolate.